

## CLAIMS

1. A method comprising the steps of:
  - receiving a first frame;
  - 5 determining a first frame rate of the first frame;
  - determining if the first frame rate was in error to produce an error determination; and
  - updating a state of a speech decoder filter based on the error determination.
- 10 2. The method of claim 1 wherein the step of determining if the first frame rate was in error comprises the steps of:
  - receiving a second frame;
  - determining a second frame rate of the second frame;
  - 15 comparing the second frame rate to the first frame rate to produce a comparison; and
  - determining if the first frame rate was in error based on the comparison.
- 20 3. The method of claim 2 wherein the step of determining if the first frame rate was in error based on the comparison comprises the step of determining if a transition from the first frame rate to the second frame rate was invalid.
- 25 4. The method of claim 2 wherein the step of determining the first frame rate comprises the step of determining a full rate frame and the step of determining the second frame rate comprises the step of determining an 8<sup>th</sup> rate frame.
5. The method of claim 1 wherein the step of determining the first frame rate comprises the step of determining the first frame rate from a group consisting of full, half, quarter, and eighth frame rates.
- 30 6. The method of claim 1 wherein the step of updating the state of the speech decoder filter comprises the step of zeroing out the state of the speech decoder filter.
7. The method of claim 1 wherein the step of updating the state of the speech decoder filter comprises the step of updating the state of a filter from a group consisting of a pitch filter, a vocal tract filter, and a post filter.
- 35 8. The method of claim 1 wherein the step of determining if the first frame rate was in error comprises the step of determining if the first frame was a signaling frame.

9. A method comprising the steps of:  
receiving a first frame;  
determining a first frame rate for the first frame;  
5 receiving a second frame;  
determining a second frame rate for the second frame;  
determining, based on the second frame rate, if the first frame rate was in error  
to produce an error determination; and  
updating a state of a speech decoder filter based on the error determination.
- 10
10. The method of claim 9 wherein the step of determining, based on the second frame rate, if the first frame rate was in error comprises the step of determining if a transition from the first frame rate to the second frame rate was invalid.
- 15
11. The method of claim 9 wherein the step of determining the first frame rate comprises the step of determining a full rate frame and the step of determining the second frame rate comprises the step of determining an 8<sup>th</sup> rate frame.
- 20
12. The method of claim 9 wherein the step of determining the first frame rate and the second frame rate comprises the step of determining frame rates from a group consisting of full, half, quarter, and eighth frame rates.
- 25
13. The method of claim 9 wherein the step of updating the state of the speech decoder filter comprises the step of zeroing out the state of the speech decoder filter.
14. The method of claim 9 wherein the step of updating the state of the speech decoder filter comprises the step of updating the state of a filter from a group consisting of a pitch filter, a vocal tract filter, and a post filter.

30

15. Apparatus comprising:

means for determining a validity of a frame rate;

a speech decoder, coupled to the means for determining, modifying a state of a filter based on the validity of the frame rate.

5

16. The apparatus of claim 15, wherein the means for determining the validity of the frame rate of the frame of information comprises means for comparing the frame rate with frame rates of previous frames of information.

10 17. The apparatus of claim 15 wherein the filter comprises a filter from a group consisting of a pitch filter, a vocal tract filter, and a post filter.

18. A method comprising the steps of:

receiving a plurality of frames;

determining a plurality of frame rates for the plurality of frames;

5 determining a number of frames having a predetermined frame rate from the plurality of frame rates; and

varying a characteristic of a frame from the plurality of frames, based on the number of frames having the predetermined frame rate.

19. The method of claim 18 wherein the step of determining the number of frames

10 having the predetermined frame rate, comprises the step of determining the number of 8<sup>th</sup> rate frames.

20. The method of claim 19 wherein the step of varying the characteristic of the frame comprises the step of varying symbol error rate (SER) threshold based on the

15 number of 8<sup>th</sup> rate frames.